

Silicon PNP Power Transistors

2SB555 2SB556

DESCRIPTION

- With TO-3 package
- Complement to type 2SD425/426
- High power dissipation

APPLICATIONS

- Power amplifier applications
- Recommended for high-power high-fidelity audio frequency amplifier output stage

PINNING(see Fig.2)

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Base |
| 2 | Emitter |
| 3 | Collector |

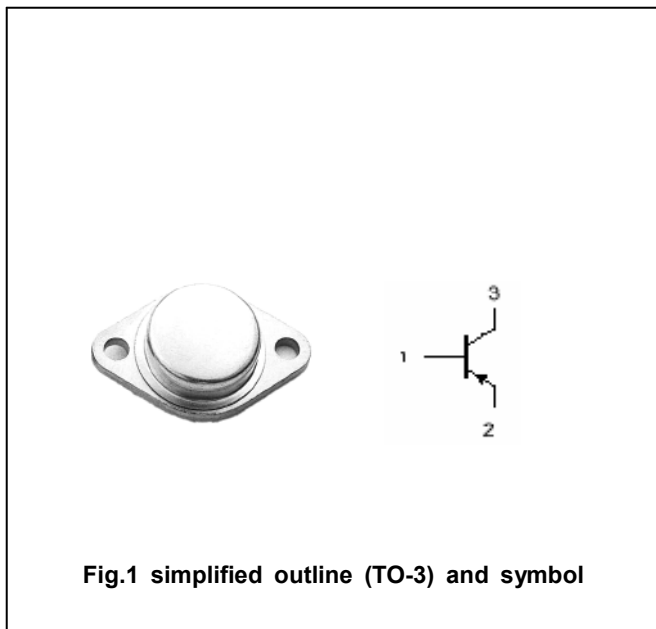


Fig.1 simplified outline (TO-3) and symbol

Absolute maximum ratings(Ta=□)

| SYMBOL | PARAMETER | CONDITIONS | VALUE | UNIT |
|------------------|-----------------------------|---------------------|---------|------|
| V _{CBO} | Collector-base voltage | 2SB555 | -140 | V |
| | | 2SB556 | -120 | |
| V _{CEO} | Collector-emitter voltage | 2SB555 | -140 | V |
| | | 2SB556 | -120 | |
| V _{EBO} | Emitter-base voltage | Open collector | -5 | V |
| I _C | Collector current | | -12 | A |
| I _E | Emitter current | | 12 | A |
| P _C | Collector power dissipation | T _C =25□ | 100 | W |
| T _j | Junction temperature | | 150 | □ |
| T _{stg} | Storage temperature | | -65~150 | □ |

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|--|------|------|------|
| V _{(BR)CEO} | Collector-emitter breakdown voltage | 2SB555 | -140 | | | V |
| | | 2SB556 | -120 | | | |
| V _{(BR)EBO} | Emitter-base breakdown voltage | I _E =-10mA ; I _C =0 | -5 | | | V |
| V _{CEsat} | Collector-emitter saturation voltage | 2SB555 | | | -3.0 | V |
| | | 2SB556 | I _C =-7A; I _B =-0.7A | | | |
| V _{BE} | Base-emitter on voltage | I _C =-7A ; V _{CE} =-5V | | | -2.5 | V |
| I _{CBO} | Collector cut-off current | V _{CB} =-50V; I _E =0 | | | -0.1 | mA |
| I _{EBO} | Emitter cut-off current | V _{EB} =-5V; I _C =0 | | | -0.1 | mA |
| h _{FE} | DC current gain | I _C =-2A ; V _{CE} =-5V | 40 | | 140 | |
| C _{OB} | Output capacitance | I _E =0 ; V _{CB} =-10V; f=1.0MHz | | 330 | | pF |
| f _T | Transition frequency | I _C =-2A ; V _{CE} =-5V | | 6 | | MHz |

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PACKAGE OUTLINE



Fig.2 outline dimensions (unindicated tolerance:±0.1mm)